1   <u>Abstract</u>

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3   The invention provides a method and system for operating a pipelined mi-

4   croprocessor more quickly, by detecting instructions that load from identical memory lo-

5   cations as were recently stored to, without having to actually compute the referenced ex-

6   ternal memory addresses. The microprocessor examines the symbolic structure of in-

7   structions as they are encountered, so as to be able to detect identical memory locations

8   by examination of their symbolic structure. For example, in a preferred embodiment, in-

9   structions that store to and load from an identical offset from an identical register are de-

10   termined to be referencing the identical memory location, without having to actually

11   compute the complete physical target address.